State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

February 17, 1998

TO: File

THRU: Daron Haddock, Permit Supervisor

FROM: David Darby, Senior Reclamation Specialist

RE: Incidental Boundary Change-Mathis Lease, Andalex Resources, Centennial Mine, ACT/007/019-99-1, Folder #2, Carbon County, Utah

SUMMARY:

The Division received a submittal by Andalex Resources,Inc. for an incidental boundary change (IBC) on January 14, 1999. The applicant proposes to add 160 acres of fee coal, located on fee land, a 3 % change to the to the current permit. The IBC is a strip of land north of Federal Lease UTU 66066. It is located in the southern part of the Mathis Land section. The applicant now wants to mine the coal using longwall methods. The submittal includes a new 1998 Raptor Survey, the probable cumulative impacts for the 640 acre Mathis Lease (which the 160 acres are included) and the right of entry documentation.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.22; R645-301-623, -301-724.

Analysis:

Geologic information for the area is presented in the Mining and Reclamation Plan (MRP), Appendix E. The IBC is an extension to the underground mine workings. Mining will take place in the Aberdeen coal seam where it is estimated reserves are approximately 518, 000 tons. Overburden in the vicinity of the IBC ranges from about 2600 to 2800 feet.

Stratigraphy and Structure

The Surface Geology Map, Plate 21 is a poor rendition of a geologic map. Typically, geologic maps simply show the features and structure over a prescribed area, strikes and dips are characterized by values, cross-sections of geologic units usually accompany the geologic map and their locations are identified by lines marked A-A1, ect. The cross-sectional maps can also identify the formations

thickness and overburden from surface to coal seam.

Findings:

The applicant should submit a complete and concise geologic map.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Permit Area Boundary Maps

The applicant submitted several maps accompanying the IBC change. All the maps identify a permit boundary far in excess of the approved permit boundary and the IBC boundary. The line designating the boundary of Federal Lease UTU-66060 appears to be different in some of the submitted maps, specifically Plate 4 and Plate

Findings:

When an amendment is received, such as an IBC proposal, the approved version is inserted in the MRP. All changes should be sequenced to fit into the existing mine plan. Maps should incorporate all approved information plus any changes that the applicant wants to incorporate. The maps submitted in the IBC are deficient with regard to this aspect. Maps should be corrected and resubmitted.

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR Sec. 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

General

Mining plans presented for mining the IBC, Plate 29, reveal mining panels and permit area boundaries. The permit boundary includes the Mathis Land, the emergency lease and some of the State Lease. The legends and maps should reflect the approved mine plan and identify the IBC as proposed areas for mining.

Type and Method of Mining Operations

The applicant plans to conduct longwall development and mining operations in the IBC. The depth of overburden ranges between 2600 feet to 2800 feet over the IBC. This amount of cover lends greater structural stability above the mined out area which leads to a reasonable conclusion that no surface impacts will result.

Facilities and Structures

There are no facilities or structures identified over the IBC.

Findings:

The maps submitted in the proposal are inaccurate in defining the permit boundary and legends should include all features presented on the maps.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Surface-water Groundwater and Monitoring

Andalex submitted Figure 5, which provides the locations of surface and groundwater monitoring sites. They make the statement that no surface or groundwater flows will be affected because mining is simply an extension of the underground workings, there are no new hydrologic basins and no new springs or streams that will be affected.

Findings:

The information provided by the applicant is probably true. However, it is presented on a single page that cannot be directly inserted into the mine plan.

RECOMMENDATION:

The applicant should resubmit maps to identify the approved mine plan boundary. All maps should contain a legend that accurately portrays all features. The applicant should submit text clearly related to the regulations and that can be inserted into the mineplan as part of the page and plan sequence.